

CLAIMS

What is claimed is:

1. An optical transmission module, comprising:

at least one photoelectric element having a plurality of signal pins and at least one non-signal pin;

a plurality of flexible printed circuit boards, one or two of the flexible printed circuit boards optionally having a ground plane, and the rest optionally having at least one signal transmission plane for connecting to said signal pins, wherein said at least one non-signal pin connects to said ground plane to prevent from electromagnetic interference; and

a printed circuit board, connecting to said flexible printed circuit board to form an electrical connection with said photoelectric element via said flexible printed circuit boards.

2. The optical transmission module according to claim 1 wherein said photoelectric element is a CAN packaged element.

3. The optical transmission module according to claim 2 wherein said photoelectric element is a Transistor Outline CAN element.

4. The optical transmission module according to claim 1 further comprises a passive element mounted on said signal transmission plane for impedance matching; one end of said passive element connects to pins of said photoelectric element; another end of said passive element connects to said printed circuit board via a signal transmission line.

5. An optical transmission module, comprising:

at least one photoelectric transmitter having a plurality of signal pins and at least one non-signal pin;

at least one photoelectric receiver having a plurality of signal pins and at least one

non-signal pin;

a plurality of flexible printed circuit boards, one or two of the flexible printed circuit boards optionally having a ground plane, and the rest optionally having at least one signal transmission plane for connecting to said signal pins, wherein said at least one non-signal pin connects to said ground plane to prevent from electromagnetic interference; and

a printed circuit board, connecting to said flexible printed circuit boards to form an electrical connection with said photoelectric transmitter/receiver via said flexible printed circuit boards.

6. The optical transmission module according to claim 1 wherein said photoelectric transmitter/receiver is a CAN packaged element.

7. The optical transmission module according to claim 2 wherein said photoelectric transmitter/receiver is a Transistor Outline CAN element.

8. The optical transmission module according to claim 1 further comprises a passive element mounted on said signal transmission plane for impedance matching; one end of said passive element connects to pins of said photoelectric transmitter/receiver; another end of said passive element connects to said printed circuit board via a signal transmission line.